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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/172,577 10/13/98 HALL

R BLANKET-358

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PM82/0502

EXAMINER

KIM, C

ART UNIT	PAPER NUMBER
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3682

DATE MAILED:

05/02/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/172,577

Applicant(s)
Hall et al.

Examiner
Chong H. Kim

Art Unit
3682



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on Feb 26, 2001

2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) 16, 17, 19, 20, 39, 42, 43, 46, 47, 50-53, and 61-68 is/are pending in the applica

4a) Of the above, claim(s) _____ is/are withdrawn from considera

5) ☒ Claim(s) 64-67 is/are allowed.

6) ☒ Claim(s) 16, 17, 19, 20, 39, 42, 43, 46, 47, 50-53, 61, and 68 is/are rejected.

7) ☒ Claim(s) 62 and 63 is/are objected to.

8) ☐ Claims _____ are subject to restriction and/or election requirem

Application Papers

9) ☒ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

a) ☐ All b) ☐ Some* c) ☐ None of:

- ☐ Certified copies of the priority documents have been received.
- ☐ Certified copies of the priority documents have been received in Application No. _____
- ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

15) ☒ Notice of References Cited (PTO-892)

16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 21

18) ☐ Interview Summary (PTO-413) Paper No(s). _____

19) ☐ Notice of Informal Patent Application (PTO-152)

20) ☐ Other: _____

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DETAILED ACTION

1. The Examiner acknowledges the Applicant's Amendment filed Feb 26, 2001 in response to the Office action made on Nov 21, 2000.

Specification

2. The amendment filed Feb 14, 2000 and Oct 10, 2000 are objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: the "vented space" in claim 16, line 3 as amended in the amendment filed Feb 14, 2000; and "without the presence of said inert gas blanket, the engine oil would present properties of needing to be changed after a few thousand miles of use in said internal combustion engine" in claims 20, 51, and 52 as amended in the amendment filed Oct 10, 2000.

Applicant is required to cancel the new matter in the reply to this Office action.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

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4. Claims 16, 17, 19, 20, 39, 42, 43, 46, 47, and 51-53 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 16 recites the limitation, "vented space in a working machine" in line 3. The space in a working machine that is vented is neither disclosed nor suggested in the specification as originally filed. Furthermore, amended claims 20, 51, and 52 recite the limitation, "without the presence of said inert gas blanket, the engine oil would present properties of needing to be changed after a few thousand miles of use in said internal combustion engine". Such limitation as described above is neither disclosed nor suggested in the specification as originally filed.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 16 and 68 are rejected under 35 U.S.C. 102(b) as being anticipated by Kopel, U.S. Patent 4,561,393.

Kopel shows, in Figs. 1 and 2, and discloses in column 1 lines 21-31, column 2 lines 63-65, and column 5 lines 53-56, a method for controlling oxidative degradation of an oleaginous liquid

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substance (oil) 124 in a generally enclosed space 140 in a working machine (internal combustion engine, see column 1 lines 11-12) having moving parts (it is inherent that every internal combustion engine has moving parts), which comprises providing the oleaginous liquid substance (oil) 124, and blanketing the oleaginous liquid substance (oil) 124 in the space 140 with an inert gas blanket (nitrogen, see column 4 lines 64-65) to control oxidative degradation of the oleaginous liquid substance (oil) 124.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 16, 17, 39, and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Elizabeth, U.S. Patent 3,617,580 in view of Fujiyama et al., JP Patent 02082304 A.

Elizabeth discloses, in the Abstract, and from column 2, line 50 to column 3, line 57, a method for controlling oxidative degradation of an oleaginous liquid substance in a generally enclosed working machine, which comprises providing the working machine having a space; providing the oleaginous liquid substance; and wherein the oleaginous is oil, and the working machine is an engine having a crankcase for holding a supply of lubricant and wherein the oil is present in the crankcase

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as the lubricant; but fails to provide an inert gas blanket to control oxidative degradation of the oil and the working machine being a transmission box or a gear box.

Fujiyama et al. teaches, in Fig. 1 and in the Abstract and Constitution, a method for providing inert gas blanket to control oxidative degradation of oil.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the solid form of oil oxidation treatment of Elizabeth with the method of providing inert gas of Fujiyama et al. in order to provide a longer lasting system that controls oxidative degradation so that the cost of maintenance can be reduced.

As to the matter of the working machine being a transmission box or a gear box, it would have been obvious to a person of ordinary skill in the art to provide the transmission box or gear box as a working machine wherein controlling oxidative degradation of oleaginous liquid substance is desired so that the machine's life can be prolonged.

9. Claims 19, 20, 42, 43, 51-53, and 61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Elizabeth in view of Fujiyama et al. as applied to claims 16, 17, 39, and 50 above, and further in view of Gast, Jr., U.S. Patent 5,649,995.

Elizabeth in view of Fujiyama et al. shows, as discussed above in the rejection of claims 16, 17, 39, and 50, a method of providing inert gas blanket into the enclosed space to control oxidation of the engine oil; and it is necessary to change the engine oil of the crankcase owing to the control of oxidative degradation of the engine oil, and the engine oil is changed only after at least twenty

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thousand miles of use in the crankcase of the internal combustion engine; but fails to show the membrane-containing device for separating the inert gas from air.

Gast, Jr. shows, in Figs. 3 and 4, a method for providing a membrane-containing device 12 to separate nitrogen from air through membrane 54.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply the membrane-containing device of Gast, Jr. to supply the inert gas of Elizabeth in view of Fujiyama et al. in order to provide higher purity nitrogen so that aging of a certain organic material can be better controlled.

10. Claims 46 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Elizabeth in view of Fujiyama et al. and in view of Gast, Jr. as applied to claims 19 and 42 above, and further in view of Tremain et al., U.S. Patent 4,594,080.

Elizabeth in view of Fujiyama et al. and in view of Gast, Jr. shows, as discussed above in the rejection of claim 19, a method of providing nitrogen blanket into the enclosed space to control oxidation of the engine oil with the membrane-containing device for separation of nitrogen and oxygen from air, but fails to teach the oxygen being delivered for consumption to a passenger cabin space.

Tremain et al. teaches, in column 1, lines 11-23, a method of providing a gas separation system which produces oxygen from ambient air and delivered to a passenger cabin space for consumption.

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It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the inert gas delivery system of Elizabeth in view of Fujiyama et al. and in view of Gast, Jr. with the teaching of the oxygen delivery system for a passenger for consumption of Tremain et al. in order to provide more oxygen to the user so that fainting or death due to the lack of oxygen can be prevented.

Allowable Subject Matter

11. Claims 64-67 are allowed.
12. Claims 62 and 63 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

13. In response to the applicant's argument that since many working machines having enclosed space and lubricants in the enclosed space are vented, the new matter rejection should be withdrawn, it is noted that just because many working machines have enclosed spaces that are vented, does not mean that every working machine has an enclosed space that is vented. There is not a single disclosure which discusses the contemplation of vented system in the specification as originally filed. In order to conclude that the working machines, in general, have vents, it has to be known to any person of ordinary skill in the art that vents are inherently present in all of the working machines.

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However, that conclusion is not true. Albeit the references presented by the applicant, there are many working machines that are air tight. For example, Wilde, U.S. Patent 2,623,186, shows an engine accessory for underwater operation, which requires the machine be air-tight without any vents to the ambient environment; Hetzel, U.S. Patent 3,792,578, teaches a transmission system which contains gears under vacuum chamber, which requires the machine be air-tight without any vents to the ambient environment; and Witt, U.S. Patent 4,414,861, discloses a gear box having gear disposed in the enclosed housing without any vents. All of the above prior art are related to the "working machine". Furthermore, the disclosure on page 8, line 16, which states "Internal pressure relief opening and/or valve 60 may be provided." does not refer to the working machine, but to the silo in Fig. 4. The silo in Fig. 4 is not a working machine. Also, the applicant elected the method claims, particularly to the working machine embodiment. Therefore, one can not just combine a feature from the non-elected species to the elected species. Therefore, in view of above prior art, the limitation, "vented" in claim 16, is a new matter and the applicant is required to cancel the new matter.

14. In response to the applicant's argument that the "overpressure" disclosed in the specification contemplates a "vent", it is noted that the disclosure of "overpressure" disclosed on page 9, line 15 does not contemplate a "vent". The context in which the word "overpressure" is used states that "the invention may apply to any system in which a substantially enclosed space or a space to which an overpressure can be applied contains an oxidizable material." The above statement does not infer or suggest that there is a "vent" provided in order to reduce the overpressure. It simply states that the space can be applied with overpressure.

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15. In response to the applicant's argument that the disclosure in the specification as originally filed contains the implicit and inherent description about the limitation "without the presence of said inert gas blanket, the engine oil would present properties of needing to be changed after a few thousand miles of use in said internal combustion engine" in claims 20, 51, and 52, it is noted that the description on page 1, lines 16-19 neither implies nor inherently shows that the engine oil would present properties of needing a change after a few thousand miles of use when there is a lack of the inert gas blanket. The description simply states that the oxidation is one of the primary enemies that breaks down automobiles, transportation and stationary power units. If the applicant contends that such description implies that the oxidation of the oil is caused by the lack of the inert gas blanket, then the question is, is the inert gas blanket the only source for preventing the oxidation of the oil? The answer is, no. There are many additives in the market that effectively prevent oxidation in engine oil. Therefore, one of ordinary skill in the art reading the Background of the specification would not arrive at the conclusion that the oxidation of the oil happens because there is lack of inert gas blanket. The applicant is required to cancel the new matter.

16. In response to the applicant's argument that Kopel does not describe the claimed invention in claim 16, it is the Examiner's contention that Kopel does describe the claimed invention as set forth in claim 16. Claim 16 recites the limitations concerning a working machine. Certainly, Kopel's sealed hydraulic lifter system is a working machine. Furthermore, the applicant argues that claim 16 requires a vented system. As set forth above in paragraph 4, and discussed above in paragraph 13, "vented

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space” is new matter because the space in a working machine that is vented is neither disclosed nor suggested in the specification as originally filed.

17. In response to the applicant’s argument that the combination of Elizabeth et al. and Fujiyama et al. does not teach nor suggest any of the claimed embodiments, it is the Examiner’s position that the combination does suggest such claimed embodiments. Elizabeth et al. discloses, in the Abstract, and from column 2, line 50 to column 3, line 57, a method for controlling oxidative degradation of an oleaginous liquid substance in the working machine such as the engine, but fails to show an inert gas blanket being provided in the working machine to control oxidative degradation of the oil. However, Fujiyama et al. teaches a method of providing inert gas blanket to control oxidative degradation of oil as described in the Abstract and Constitution. Therefore, it would have been obvious to a person of ordinary skill in the art to modify the oxidation treatment of Elizabeth et al. with the inert gas blanket method of Fujiyama et al. in order to provide a longer lasting system that controls oxidative degradation so that the cost of maintenance can be reduced.

18. In response to applicant’s argument that Fujiyama et al. (or Horiba as the applicant prefers) is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant’s endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Fujiyama et al. is reasonably pertinent to the particular problem with which the applicant was concerned. Fujiyama et al. teaches a method of providing inert gas blanket to control oxidative degradation of oil as described in the

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Abstract and Constitution. Certainly, the method provided by Fujiyama et al. would overcome the problem of oxidation in which the applicant is concerned with.

19. In response to the applicant's argument that Fujiyama et al. and Gast, Jr. are nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Fujiyama et al. and Gast, Jr. are reasonably pertinent to the particular problem, that is keeping elements from oxidizing, with which the applicant was concerned.

20. In response to the applicant's argument that Tremain et al. is not properly applicable because it relates to delivery of Oxygen and not nitrogen, it is noted that the intent of utilizing Tremain et al. is to show the obviousness of providing oxygen to the passenger cabin space to make sure that the operator or passengers are kept from fainting or death when operating a machine. Elizabeth et al. in view of Fujiyama et al. and in view of Gast, Jr. teaches all the limitations, including the provision of nitrogen gas as recited in claims 16, 19, and 42, except the limitation that deals with providing oxygen to a passenger cabin space. Thus Tremain et al. provides such remedy by teaching that one of ordinary skill in the art may utilize the separated oxygen to be given to the passengers in a passenger cabin space.

21. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a

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sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Conclusion

22. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

23. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Generally enclosed working machine without vents.

Wilde, U.S. Patent 2,623,186

Hetzel, U.S. Patent 3,792,578

Witt, U.S. Patent 4,414,861

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Facsimile Transmission

Submission of your response by facsimile transmission is encouraged. Group 3600's facsimile number is (703) 305-7687. Recognizing the fact that reducing cycle time in the processing and examination of patent applications will effectively increase a patent's term, it is to your benefit to submit responses by facsimile transmission whenever permissible. Such submission will place the response directly in our examining group's hands and will eliminate Post Office processing and delivery time as well as the PTO's mail room processing and delivery time. For a complete list of correspondence not permitted by facsimile transmission, see MPEP 502.01. In general, most responses and/or amendments not requiring a fee, as well as those requiring a fee but charging such fee to a deposit account, can be submitted by facsimile transmission. Responses requiring a fee which applicant is paying by check should not be submitting by facsimile transmission separately from the check.

Responses submitted by facsimile transmission should include a Certificate of Transmission (MPEP 512). The following is an example of the format the certification might take:

I hereby certify that this correspondence is being facsimile transmitted to the Patent and Trademark Office (Fax No. (703) 305-7687) on _____ (Date)

Typed or printed name of person signing this certificate:


(Signature)

If your response is submitted by facsimile transmission, you are hereby reminded that the original should be retained as evidence of authenticity (37 CFR 1.4 and MPEP 502.02). Please do not separately mail the original or another copy unless required by the Patent and Trademark Office. Submission of the original response or a follow-up copy of the response after your response has been transmitted by facsimile will only cause further unnecessary delays in the processing of your application; duplicate responses where fees are charged to a deposit account may result in those fees being charged twice.

24. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chong H. Kim whose telephone number is (703) 305-0922

CHK 

April 30, 2001


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